KODAK
Miniloader 2000

Kodak

United States:

**FEDERAL LAW RESTRICTS THIS DEVICE
TO SALE OR ORDER BY PHYSICIANS.**

CONTENTS

GENERAL DESCRIPTION

The KODAK Miniloader 2000 is a unit for loading and unloading of film cassettes and for storage of exposed films. The load/unload and storage modules are micro-processor controlled. Special functions, statistics, and controls are accessed by the soft switches and display unit at the front panel.

The KODAK Miniloader 2000 can hold up to two film supply magazines and is compatible only with KODAK MIN-R 2 Cassettes with button.

Exposed film is automatically removed from the cassette inserted into the KODAK Miniloader 2000, the cassette is reloaded with unexposed film and returned to the operator in less than 15 seconds.

The exposed film is stored in a special receive magazine.

IMPORTANT:

Please be aware of the fact that this unit may only be used for loading and unloading of film cassettes and storage of exposed films (sizes and types as specified on page 1-3 of this Operator Guide).
The unit must not be used for any other operations.

SPECIFICATIONS

Cassette Sizes and Types:	**KODAK MIN-R 2 cassettes (button cassettes only)** 18 x 24 cm, 24 x 30 cm
No. of Magazines	2 film supply magazines 1 receive magazine
Supply Magazines:	Supply magazines are available for the above-mentioned cassette sizes. Two sizes may be installed in the KODAK Miniloader 2000 at any one time. Each supply magazine can contain up to 115 films .
Receive Magazines:	A receive magazine can be filled with up to 120 films. A receive magazine can either be coded as dedicated for a film size 18 x 24 cm or 24 x 30 cm, or it can be left uncoded (further details on pages 10 and 11 of this operator guide).
Cassette Return Time:	15 seconds
Capacity:	Approx. 200 cassettes/hour

Dimensions:

width	550 mm	(21.6")
height	1235 mm	(50")
depth	610 mm	(24")

Weight:	220 kg (486 lbs)
Recommended Operating Conditions:	temperature 15-30° C (59-86°F) humidity 20-60% RH atmospheric pressure 1.03×10^5 to 0.8×10^5 Pa
Power Supply:	100/115/120/200/220/230/240 V 50/60 Hz 4.4/ 2.2 A **SPECIAL EUROPEAN REQUIREMENT:**

> **Voltage set on installation:**
> (A sticker showing the voltage set on installation will be fixed on this space by your KODAK SERVICE PROVIDER)

Max. Power Consumption:	300 W

| **Heat Dissipation:** | 1080 kJ | (1025 BTU) |

Noise level: Stand-by - < 40 dBA
  Operation - tbd

Fuses (Europe):	F1: T 1,60 A	F3: T 8,00 A
	F4: T 6,30 A	F5: T 3,15 A
	F6: T 4,00 A	F7: T 1,60 A
	F8: T 3,15 A	F9: T 3,15 A
	F10: T 3,15 A	F11: T 3,15 A

DECLARATION OF CONFORMITY

We declare our sole responsibility that the product

KODAK Miniloader 2000
Cat No. 718 4500

to which this declaration relates is in conformity with the following standards and, therefore, bears a CE mark:

EN 60601-1/1990 and EN 60601-1-2/1994.

The unit is following the provisions of the applicable directives

93/42/EEC and amendments.

SAFETY STANDARDS

The KODAK Miniloader 2000 is in conformity with International Safety requirements and bears the following safety marks:

- UL (Underwriter Laboratories, UL 122)
- CUL (Underwriter Laboratories test for Canadian Standards Association, CSA 22.2 No. 950)
- GM (TÜV Rheinland, EN 60601-1)

GENERAL WARNINGS

WARNINGS:

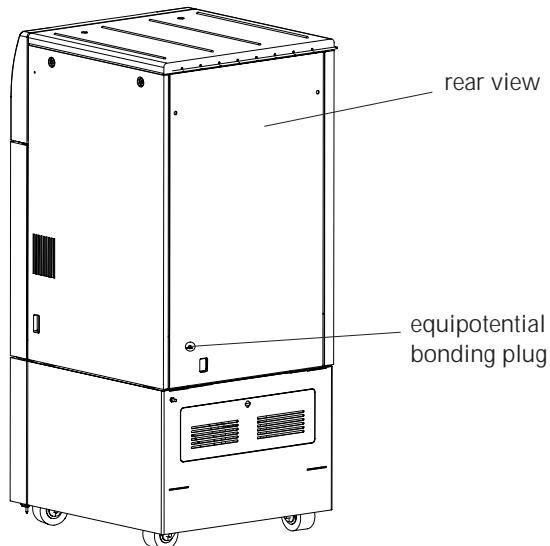Dangerous voltages are present in this machine.

The operator is only allowed to open the top cover and the magazine door.

This product does not contain any parts that would have to be repaired by
the operator.
Do not perform repairs yourself, call for a qualified KODAK SERVICE person.

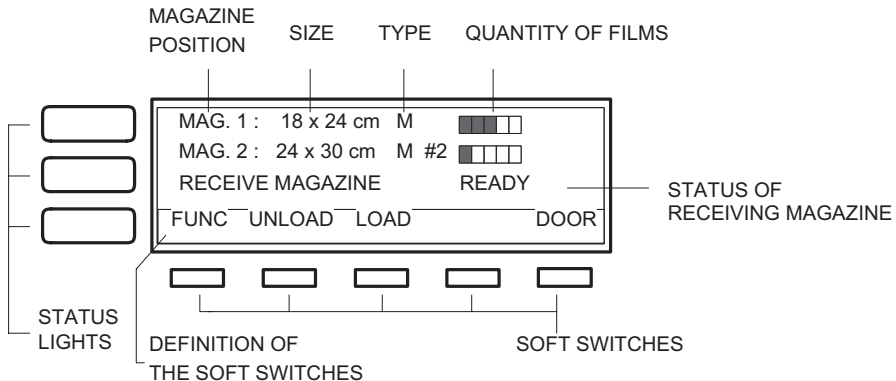The venting slots at the sides and the back of the unit must not be covered.

If, on installation, your KODAK SERVICE PROVIDER connected the KODAK
Miniloader 2000 to the equipotential busbar using the equipotential bonding plug,
this connection may not be interrupted, i. e. you are not allowed to pull off the
cable coming from the equipotential busbar (see illustration below).

rear view

equipotential
bonding plug

OPERATING CONTROLS, STATUS LIGHTS AND DISPLAY

THE DISPLAY

MAGAZINE
POSITION   SIZE   TYPE   QUANTITY OF FILMS

MAG. 1 :   18 x 24 cm   M
MAG. 2 :   24 x 30 cm   M #2
RECEIVE MAGAZINE   READY

FUNC   UNLOAD   LOAD   DOOR

STATUS OF
RECEIVING MAGAZINE

STATUS
LIGHTS

DEFINITION OF
THE SOFT SWITCHES

SOFT SWITCHES

M   Mammography (KODAK MIN-R 2 Cassette with button)

#2   Alternative or Special film (for a film of the same size already being used,
but with a different emulsion.

?   The ? sign indicates that a fresh magazine has been installed and until it has
been used the KODAK Miniloader 2000 does not know the number of
films within the magazine.

STATUS LIGHTS

GREEN On	KODAK Miniloader 2000 is ready, cassette may be inserted.
ORANGE On	In operation, cassette is being unloaded/loaded. Or receive magazine is full. Or complete cycle not possible - in that case, please observe messages on display.
RED Flashing	**Warning** indication, observe messages on display.

RED On   Malfunction indication, observe messages on the display
                          and follow instructions given.

An audible alarm will draw attention to the RED status light.

| Note: |

**The KODAK Miniloader 2000 is provided with an integrated sensor
which will automatically be dimming all lights of the display
when the unit is placed in a darkroom.
This function is optional and has to be set by your KODAK SERVICE PROVIDER.**

MAGAZINE STATUS . . . .

(Shown on the display)

more than 70 films

50 - 70 films

30 - 50 films

10 - 30 films

(flashing)

10 or less films

EMPTY   magazine empty

- - - - -   film size not usable, as a magazine dedicated for a
                         different size has been inserted

?   unknown status

OPERATION

After the cassette has entered the KODAK Miniloader 2000 the cassette size is determined and the correct magazine selected. The cassette is opened, the exposed film is removed and transported to the receive magazine. At the same time a fresh film is selected from the magazine and loaded into the cassette. The cassette is closed, then returned to the operator within 15 seconds from cassette insertion. The exposed film is stored in a special receive magazine.

SPECIAL REMARKS FOR OPERATION IN A VAN

For transportation of the KODAK Miniloader 2000 in a van a special VAN KIT is necessary which can be ordered separately.
Should the unit be operated in a van and the temperature be outside the recommended limits, a temperature adaption time of one hour is required.
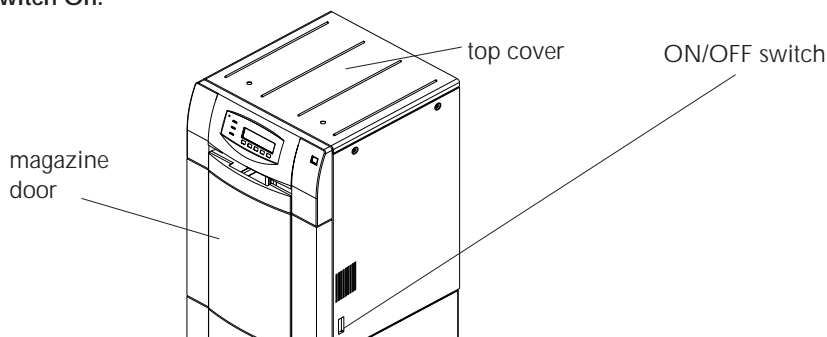
NOTE:

The unit must not be operated in a moving van.
For transportation in a van, all supply and receive magazines have to be removed.
Otherwise, this can cause serious damage to the unit.

SWITCHING ON THE SYSTEM

Ensure that the magazine door and the top cover are closed.
Switch On:

The GREEN status light will now be illuminated, and the KODAK Miniloader 2000 is ready for use.

INSERTING A CASSETTE
. . . .

The KODAK Miniloader 2000 will only accept KODAK MIN-R 2 Cassettes with the
button.
Check that the GREEN status light is on and the display indicates that a corresponding
size of magazine is available.

```
MAG. 1 :   18 x 24 cm   M  #2  ████████
MAG. 2 :   24 x 30 cm   M      ██░░░░
RECEIVE MAGAZINE               READY
FUNC   UNLOAD   LOAD                    DOOR
```

Insert the cassette **latch up and metal edge towards the KODAK Miniloader 2000.**
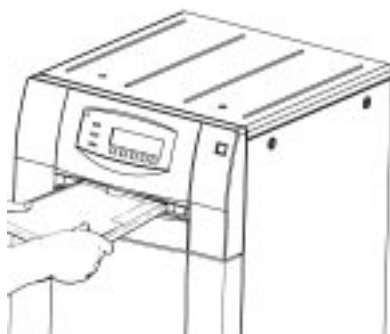

```
┌──────────────────────────────────────────────────────┐
│                      WARNING:                          │
│        Do not place your hands in cassette entrance.   │
│  Release cassette as soon as it is pulled into the     │
│                KODAK Miniloader 2000.                  │
└──────────────────────────────────────────────────────┘
```
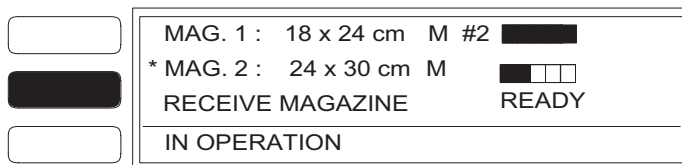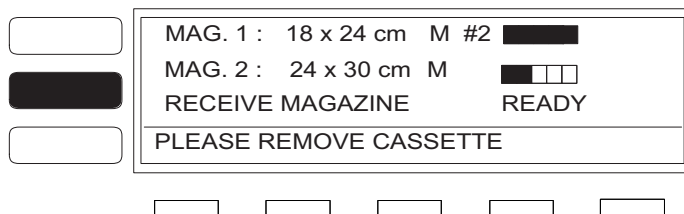
The cassette is then pulled into the KODAK Miniloader 2000, and the ORANGE
status light comes on. The display shows:

```
MAG. 1 :   18 x 24 cm   M  #2  ████████
* MAG. 2 :   24 x 30 cm   M    ██░░░░
RECEIVE MAGAZINE               READY
IN OPERATION
```

* = Magazine in use

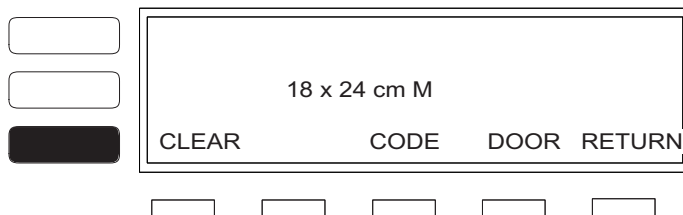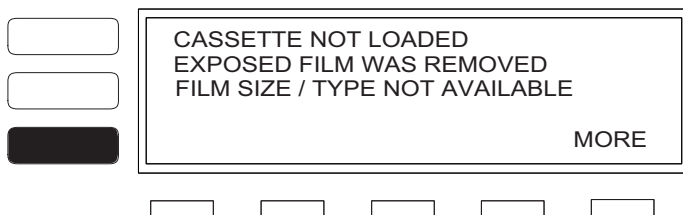This indicates that a cassette is inside the KODAK Miniloader 2000 and an unload/load operation cycle is in progress.

After loading with a fresh film, the cassette is closed and returned. The display shows:

```
MAG. 1 :   18 x 24 cm   M  #2  ███████
MAG. 2 :   24 x 30 cm   M      ██ ▢ ▢ ▢
RECEIVE MAGAZINE                READY
PLEASE REMOVE CASSETTE
```

Remove the cassette.
The GREEN status light goes on. The display returns to the main menu.
The KODAK Miniloader 2000 is ready for the next operation.

Should the RED status light flash and the audible alarm sound, please observe the messages on the display. The warning message must be cancelled by pressing the soft switch marked < CLEAR > after the cassette has been removed. If a message consists of more than 3 display lines, it is divided into several screens, and you can scroll through it by pressing the soft switches <MORE > or < RETURN >.

```
CASSETTE NOT LOADED
EXPOSED FILM WAS REMOVED
FILM SIZE / TYPE NOT AVAILABLE
                                MORE
```

```

              18 x 24 cm M

CLEAR           CODE    DOOR  RETURN
```
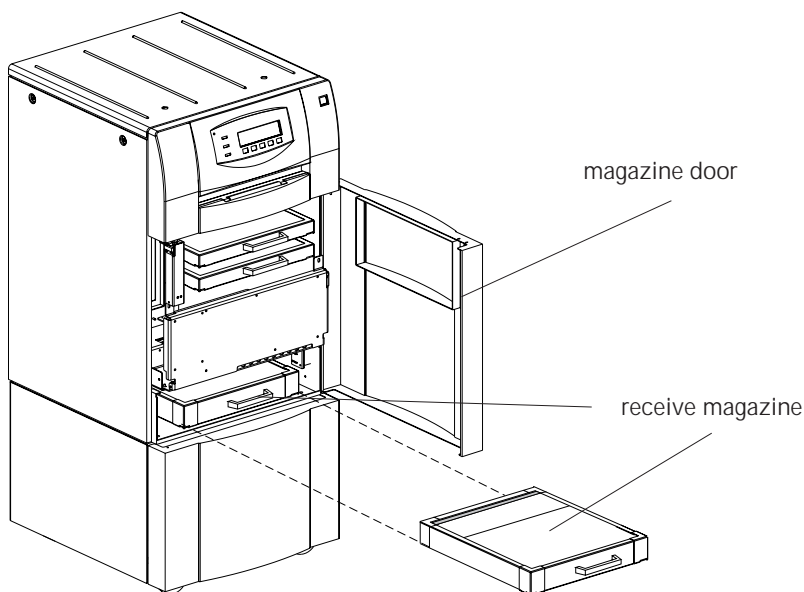
If the RED status light is constantly on and the audible alarm sounds a malfunction has occurred. In this case follow the instructions given in the detailed part of this guide.

```
CAUTION !
PLEASE CALL FOR SERVICE
. . . . . . . . .
```
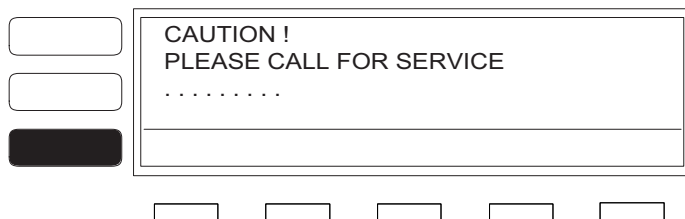
STORAGE IN RECEIVE MAGAZINE
· ·

The exposed films are automatically stored in the receive magazine.

magazine door

receive magazine

Each receive magazine can hold up to 120 films.

On installation of the unit, your KODAK SERVICE PROVIDER can set up the unit either for dedicated or for mixed film sizes. He will then code each receive magazine as dedicated for a certain film size, or leave the receive magazines uncoded.
In the first case, the receive magazine can then only be used with the size coded.
In the second case, the receive magazine is adjusted for the larger size and can also be used for the smaller size.

| Note: |

Should you wish to change the settings of dedicated or mixed film sizes or the codes of the receive magazines, please call your KODAK SERVICE PROVIDER.

Your choice of dedicated film sizes, or mixed film sizes, will effect the messages that appear on the display when a receive magazine has been inserted:
- On operation with dedicated film sizes the display will show "RECEIVE MAGAZINE" and the used film size in the respective display line.
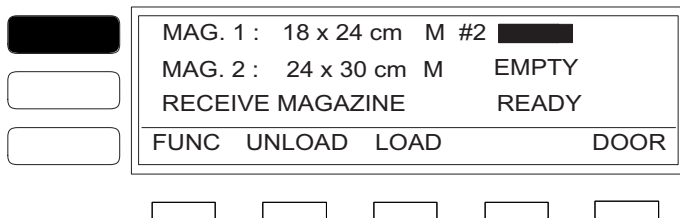- On operation with mixed film sizes "RECEIVE MAGAZINE READY" will appear in the respective display line.

SWITCHING OFF THE KODAK MINILOADER 2000

Switch off the KODAK Miniloader 2000 as indicated below.

ON/OFF switch
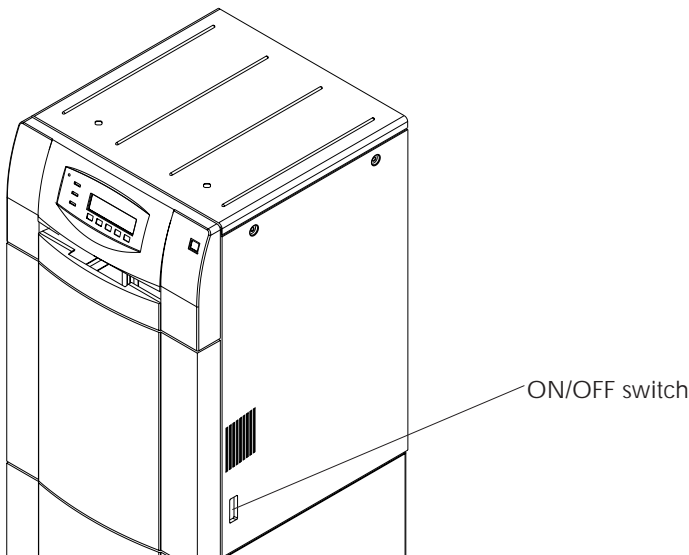
ACCESS TO MAGAZINES

The magazine door can only be opened in the READY mode. Opening the door will turn on the ORANGE light. When the door is closed again the display returns to the main display, and the GREEN status light goes on.

```
┌──────────┐   ┌──────────────────────────────────────┐
│  ████    │   │  MAG. 1 :   18 x 24 cm   M  #2 ████   │
└──────────┘   │  MAG. 2 :   24 x 30 cm   M    EMPTY   │
┌──────────┐   │  RECEIVE MAGAZINE             READY   │
└──────────┘   ├──────────────────────────────────────┤
┌──────────┐   │  FUNC   UNLOAD   LOAD          DOOR   │
└──────────┘   └──────────────────────────────────────┘
```

With the GREEN status light on, the magazine door can be opened by pressing the soft switch <DOOR> on the display.
When the magazine door is opened, the display changes as follows, and the status light goes to ORANGE.

```
┌──────────┐   ┌──────────────────────────────────────┐
│          │   │  MAG. 1 :   18 x 24 cm   M  #2 ████   │
└──────────┘   │  MAG. 2 :   24 x 30 cm   M    EMPTY   │
┌──────────┐   │  RECEIVE MAGAZINE             READY   │
│  ████    │   ├──────────────────────────────────────┤
└──────────┘   │  CLOSE THE DOOR PLEASE                │
┌──────────┐   └──────────────────────────────────────┘
└──────────┘
```
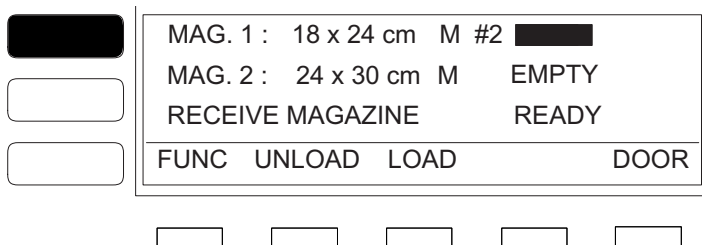
In case of difficulties with the door opening via soft switch <DOOR> on the display, you can also open the top cover first (see page 30), and then pull the string as shown in the figure below. This will release the magazine door.


string
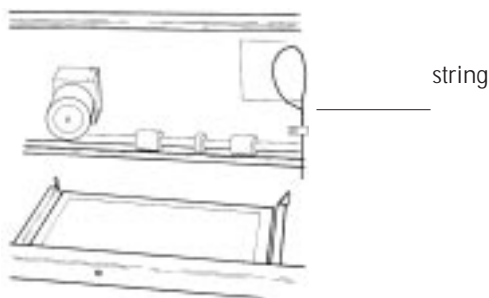
Details for removing and loading supply magazines, or exchanging the receive magazine are given in the following chapters "LOADING THE SUPPLY MAGA-ZINES" on page 13 and "EXCHANGING THE RECEIVE MAGAZINE" on page 17).

LOADING THE SUPPLY MAGAZINES

Open the magazine door by pressing the soft switch <DOOR> on the display.

```
MAG. 1 :   18 x 24 cm   M  #2  ▬▬▬▬
MAG. 2 :   24 x 30 cm   M      EMPTY
RECEIVE MAGAZINE               READY
FUNC   UNLOAD   LOAD                DOOR
```

Disengage the empty supply magazine by lifting it slightly and pull it out.
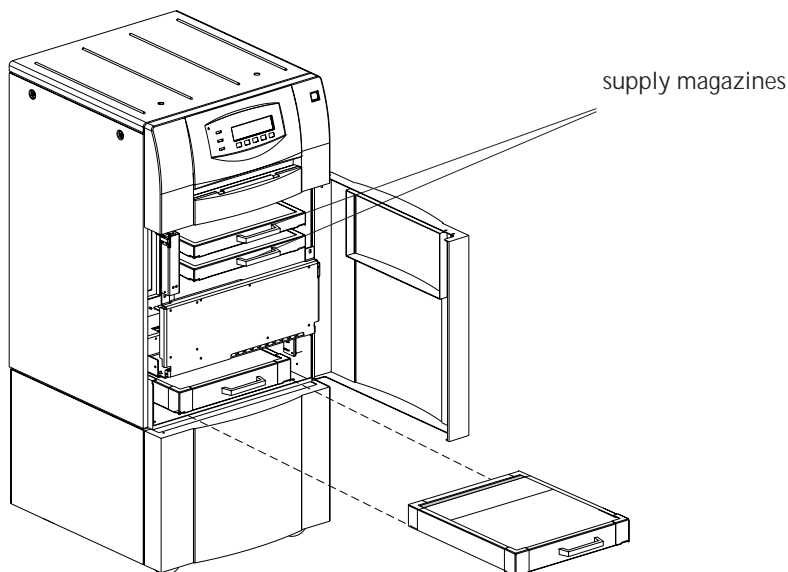
supply magazines

When a supply magazine is removed, the display will show the magazine level without size, application, type and film quantity.
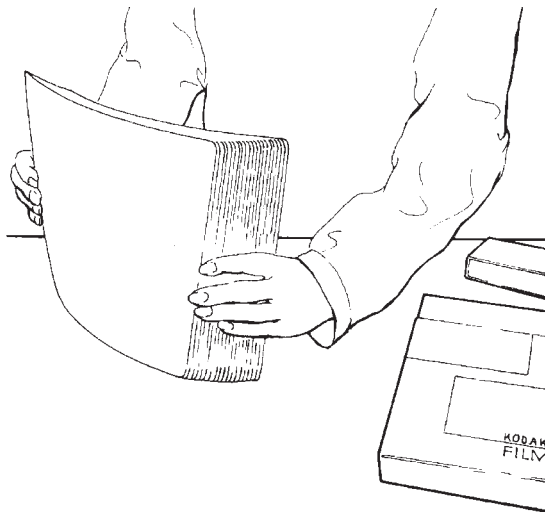
Close the magazine door.

Reload the supply magazine in a dark room (lights off) as described on the next page.

Place the supply magazine on a flat surface in the darkroom.
Push both latches in and lift the lid to open the magazine.
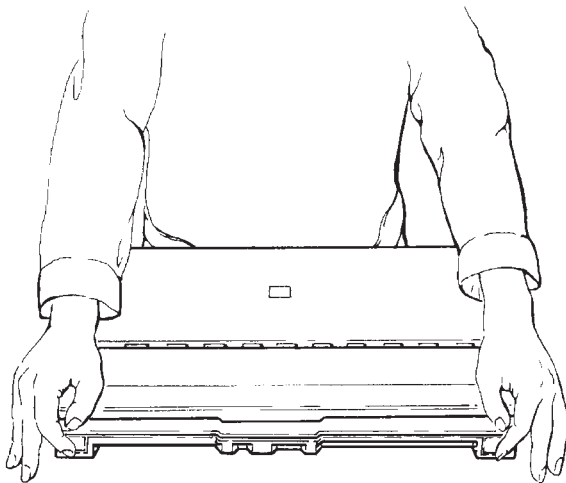
Open film pack. Remove films and riffle them carefully.
It might be helpful to divide the film pack in several stacks.

Remove any remaining films from the supply magazine.
Push the new films all the way into the supply magazine.
Place the films removed in the previous step, on top of the new films. They should be used first. Do not load the supply magazine with more than 115 films.

Note:

Single emulsion films must be loaded into the supply magazine with the emulsion up.
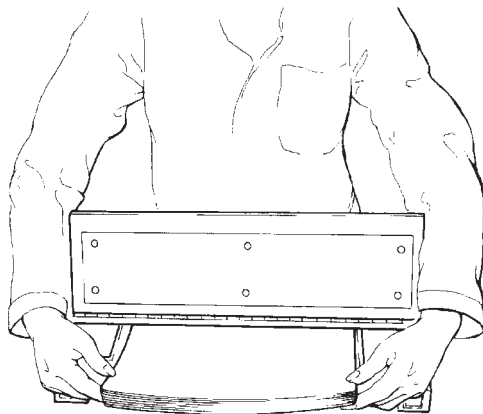
Close the magazine lid. You hear the latches "click".
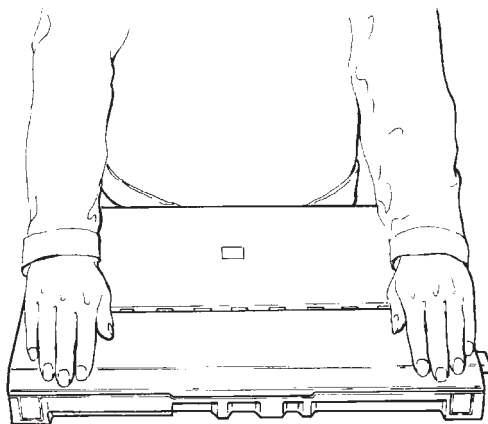
Open the magazine door again by pressing the soft switch <DOOR> on the display.
Slide the supply magazine in all the way to the stop, and then press it down to lock it in the tray.
The supply magazine must fit beyond the black rollers.

Close the magazine door.

When inserting a new supply magazine or the same magazine again, the display will show a '?' for the film quantity, because the magazine film quantity is not known until the first film is removed from the magazine. After closing the magazine door, the GREEN status light will be on again.The display will now show the film formats available.
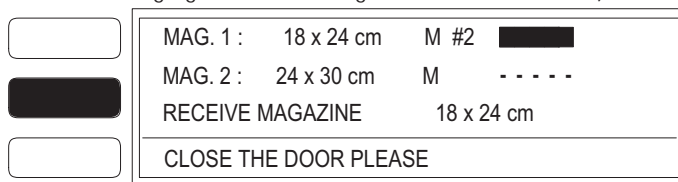
```
MAG. 1 :  18 x 24 cm  M  #2  ▬▬▬
MAG. 2 :  24 x 30 cm  M       ?
RECEIVE MAGAZINE         READY
FUNC   UNLOAD   LOAD          DOOR
```

EXCHANGING THE RECEIVE MAGAZINE
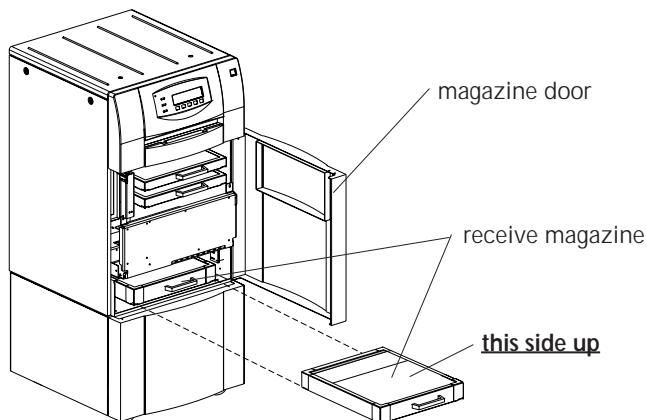
RECEIVE MAGAZINE FULL

When the receive magazine is full, this is indicated by the ORANGE status light and an alternating beep after cassette removal. The display will show the following:

```
RECEIVE MAGAZINE          FULL

FUNC                      DOOR
```

Open the front door by pressing the soft switch <DOOR> on the display. The display will show the following (if you are using dedicated receive magazines; should you not work with dedicated receive magazines, the display will be slightly different, but the procedure of exchanging the receive magazine will be the same):

```
MAG. 1 :    18 x 24 cm     M  #2  ▉▉▉▉
MAG. 2 :    24 x 30 cm     M     - - - - -
RECEIVE MAGAZINE          18 x 24 cm
CLOSE THE DOOR PLEASE
```

Exchange the receive magazine as follows: Pull out the full receive magazine.

magazine door

receive magazine

this side up

The display will indicate:

```
                MAG. 1 :   18 x 24 cm   M  #2  ███████
                MAG. 2 :   24 x 30 cm   M      EMPTY
                RECEIVE MAGAZINE

                CLOSE THE DOOR PLEASE
```

Slide in an empty receive magazine and push it to the stop.
Close the door.

The display will now show the following:

```
                MAG. 1 :     18 x 24 cm     M  #2  ███████
                MAG. 2 :   24 x 30 cm       M      - - - - -
                RECEIVE MAGAZINE                   18 x 24 cm

                FUNC     UNLOAD    LOAD              DOOR
```

| Note: |

Without a receive magazine in place, a cycle is not possible.

If there is no receive magazine present after closing the door, the display will show
the following:

```
                 PLEASE INSERT RECEIVE MAGAZINE

                 FUNC                            DOOR
```
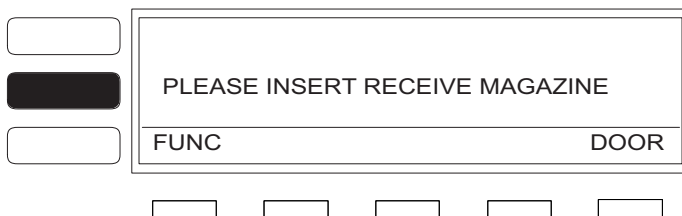
INCORRECT SIZE OF RECEIVE MAGAZINE

When you are working with **dedicated** receive magazines (described in chapter "STORAGE IN RECEIVE MAGAZINE" on page 10 of this Operator Guide), the unit will only accept cassettes with the film size corresponding with the inserted receive magazine. Cassettes with the wrong size will be returned to you immediately. The receive magazine then has to be exchanged as follows:

| MAG. 1 : 18 x 24 cm   M #2 ■■■■ |
| MAG. 2 : 24 x 30 cm   M   - - - - - |
| RECEIVE MAGAZINE   18 x 24 cm |
| FUNC   UNLOAD   LOAD   DOOR |

If, for example, a receive magazine dedicated for film size 18 x 24 cm is in position, and you would insert a cassette sized 24 x 30 cm, the display would indicate:

| EXPOSED FILM NOT REMOVED |
| INSERT RECEIVE MAGAZINE   24 x 30 cm |
| CLEAR   CODE   DOOR RETURN |

In that case, please open the magazine door, remove the incorrect receive magazine, and slide in the correct one as described on pages 17 and 18 of this Operator Guide.

Close the magazine door.

The display will now indicate:

| MAG. 1 : 18 x 24 cm   M #2 - - - - - |
| MAG. 2 : 24 x 30 cm   M   ■■□ |
| RECEIVE MAGAZINE   24 x 30 cm |
| FUNC   UNLOAD   LOAD   DOOR |

The unit is now ready for operation with cassettes sized 24 x 30 cm.

SPECIAL FUNCTIONS

Five soft switches are located below the display. The lowest display line shows the function of these switches.

```
┌──────────┐  ┌──────────────────────────────────────┐
│██████████│  │ MAG. 1 :   18 x 24 cm   M  #2 ██████  │
└──────────┘  │ MAG. 2 :   24 x 30 cm   M     ██▢▢▢   │
┌──────────┐  │ RECEIVE MAGAZINE              READY   │
└──────────┘  ├──────────────────────────────────────┤
┌──────────┐  │ FUNC   UNLOAD   LOAD           DOOR   │
└──────────┘  └──────────────────────────────────────┘

          ▭       ▭        ▭        ▭        ▭
```
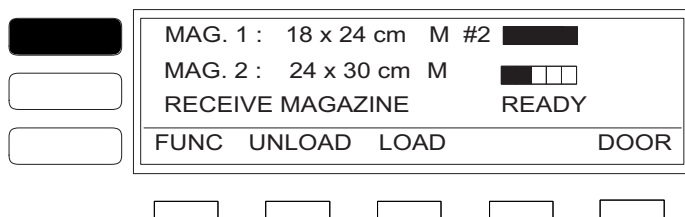
LOAD ONLY and **UNLOAD ONLY** may be selected directly by the soft switches on the menu shown above.

Other special functions, such as **Type 2** (alternative grade of film), **USAGE** (statistics on used films), or displayed **LANGUAGE** may be selected manually via the soft switch <**FUNC**>.

LOAD ONLY
When the KODAK Miniloader 2000 is ready for operation you may select the
"LOAD ONLY" mode by pressing <LOAD>.The display then shows the following:

```
┌─────────────────────────────────────────┐
│  LOAD  ONLY                              │
│  INSERT EMPTY CASSETTE                   │
│ ─────────────────────────────────────── │
│  TYPE 2                          CLEAR   │
└─────────────────────────────────────────┘
```

An inserted empty cassette will be loaded only.

The KODAK Miniloader 2000 checks whether a film is in the cassette.
If the cassette contains a film although you selected "LOAD ONLY", the following
message will be displayed, and an audible alarm will be started. The film will be
removed and stored in the receive magazine.
Pressing <CLEAR> will stop the alarm and return you to the main display.

```
Flashing
┌─────────────────────────────────────────┐
│  EXPOSED FILM WAS REMOVED                │
│  CASSETTE WAS NOT EMPTY                  │
│ ─────────────────────────────────────── │
│  CLEAR          CODE    DOOR  RETURN     │
└─────────────────────────────────────────┘
```

Should your KODAK Miniloader 2000 be set for operation with receive magazines
dedicated for certain film sizes, please pay attention to the following:
If you insert a film cassette for the "LOAD ONLY" function, and the size of the
cassette does not correspond with the size of the inserted receive magazine, the
cassette will be returned immediately. In that case, please exchange the receive
magazine as described on page 19 of this Operator Guide.

Note:

**Like all other cycles, "LOAD ONLY" will only function
when a receive magazine has been inserted.**

UNLOAD ONLY

```
MAG. 1 :   18 x 24 cm   M  #2  ████
MAG. 2 :   24 x 30 cm   M        ██▢▢
RECEIVE MAGAZINE              READY
FUNC   UNLOAD   LOAD              DOOR
```

If the KODAK Miniloader 2000 is ready for operation you may select the "UNLOAD ONLY" mode by pressing <UNLOAD>. The display will then show the following, and an inserted cassette will be unloaded.

```
UNLOAD  ONLY



                                   CLEAR
```

Depending on the parameter chosen by your KODAK SERVICE PROVIDER on installation of the unit, the cassette will now either be

- **returned open** (without a warning message), the display showing the following:

```
  MAG. 1 :   18 x 24 cm   M  #2  ████
* MAG. 2 :   24 x 30 cm   M        ██▢▢
  RECEIVE MAGAZINE              READY
  PLEASE REMOVE CASSETTE
```

Or it will be

- **returned closed** with a warning message and an audible alarm, the display
  showing the following:

```
┌──────────┐  ┌─────────────────────────────────────────────┐
│          │  │  CASSETTE NOT LOADED                         │
├──────────┤  │                                              │
│██████████│  │                                              │
├──────────┤  │                                              │
│ Flashing │  │                                     CLEAR    │
└──────────┘  └─────────────────────────────────────────────┘
               ┌────┐   ┌────┐   ┌────┐   ┌────┐   ┌────┐
               └────┘   └────┘   └────┘   └────┘   └────┘
```

If the inserted cassette was empty for UNLOAD ONLY, the following message will be
displayed and an audible alarm will be started.

```
┌──────────┐  ┌─────────────────────────────────────────────┐
│          │  │  EXPOSED FILM NOT REMOVED                    │
├──────────┤  │  PLEASE CHECK CASSETTE IN DARKROOM           │
│██████████│  │                                              │
├──────────┤  │                                              │
│ Flashing │  │  CLEAR           CODE    DOOR  RETURN         │
└──────────┘  └─────────────────────────────────────────────┘
               ┌────┐   ┌────┐   ┌────┐   ┌────┐   ┌────┐
               └────┘   └────┘   └────┘   └────┘   └────┘
```
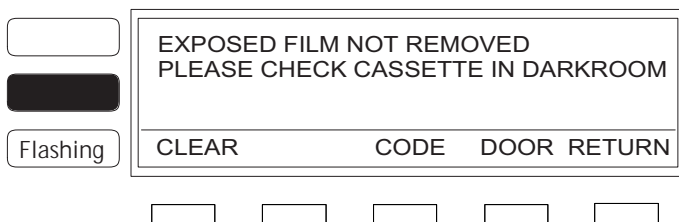
Press <CLEAR>. This will stop the alarm, and you will return to the main display.

Should your KODAK Miniloader 2000 be set for operation with receive magazines
dedicated for certain film sizes, please pay attention to the following:
If you insert a film cassette for the "UNLOAD ONLY" function, and the size of the
cassette does not correspond with the size of the inserted receive magazine, the
cassette will be returned immediately. In that case, please exchange the receive
magazine as described on page 19 of this Operator Guide.

FUNCTION ···

MAG. 1 :   18 x 24 cm   M #2 ▓▓▓▓
MAG. 2 :   24 x 30 cm   M   �▓▓□□□
RECEIVE MAGAZINE   READY
FUNC   UNLOAD   LOAD   DOOR

After pressing <FUNC> the display will show the following.

FUNCTION

TYPE 2   USAGE   LANG   CLEAR

This menu offers you access to functions FILM TYPE 2, FILM USAGE, and LANGUAGES.

FILM TYPE 2

The KODAK Miniloader 2000 may be "loaded" with either of two different film types of the same size.

In order to prevent a film mix-up, the supply magazines used for film TYPE 2 must be coded by your KODAK SERVICE PROVIDER, or a trained key operator.

Should it be necessary to load cassettes with a different type of film of the same size, <TYPE 2> must be pressed.

The selected special function is valid only for the next cycle.

After removing the cassette from the entrance slot, the KODAK Miniloader 2000 will return to the normal mode.

FILM USAGE

After pressing <USAGE> the display will show the following:

```
USAGE

2MONTH          TOTAL          CLEAR
```

This function offers the following statistics:

Pressing <2MONTH>   will show the number of films used this month and
                       last month (by sizes and types).

```
FILM USAGE
18 x 24 cm M # 1        MAY: 103
                        APR: 206

          ▽      △           RETURN
```

By means of the soft switches "Δ "and "∇" you can scroll
through the film sizes.

Pressing <TOTAL>   will show the number of films used last year and this year.

```
GRAND TOTAL: SINCE JAN /01/96    XXXXX
LAST YEAR            XXXXXX

                                RETURN
```

By pressing <CLEAR> you can always return to the main menu.

LANGUAGES

The KODAK Miniloader 2000 offers messages in 12 different languages.

English	Finnish
French	Norwegian
German	Spanish
Italian	Swedish
Danish	Portuguese
Dutch	Japanese

A maximum of 4 languages can be selected. The selection will be made during installation (the factory setting is shown in the figure below, your KODAK SERVICE PROVIDER can change the 4 selected languages during installation or at any later time). To change the displayed language press <LANG> . The display will show the following:

CHANGE LANGUAGE

DEUTSCH FRANC. JAPAN ENGLISH CLEAR

Select the desired language by pressing the respective soft switch.
After your selection the display returns to the main menu.

Press <CLEAR> if you want to cancel your decision.

ERROR MESSAGES

Message Displayed	Explanation
EXPOSED FILM NOT REMOVED. PLEASE CHECK CASSETTE IN DARKROOM.	The cassette may be empty and the user did not choose the <LOAD ONLY> mode. The machine feeds the cassette back, because a film could be sticking to the upper screen inside the cassette.
EXPOSED FILM WAS REMOVED. CASSETTE WAS NOT EMPTY.	The special function <LOAD ONLY> was selected, but a film was in the cassette when it was entered.
EXPOSED FILM NOT REMOVED. PLEASE RE-ENTER CASSETTE.	Cassette was incorrectly inserted. If the message appears repeatedly, check the cassette in the darkroom. If there is no film in the cassette have it checked by your KODAK SERVICE PROVIDER.
FILM SIZE/TYPE NOT AVAILABLE.	The chosen magazine is not available.
FILM SIZE/TYPE NOT AVAILABLE. MAGAZINE XX*YY EMPTY	The chosen magazine was empty when cassette was inserted. The cassette is RETURNED as no film was loaded (it can be returned opened or closed, depending on how it has been set during the installation).
PLEASE CHECK CORRECT MAGAZINE LNSERTION.	The magazine is probably not positioned correctly.
REMOVE AND CHECK MAGAZINE	If no film was removed from the magazine.
PLEASE RIFFLE FILMS IN MAGAZINE.	The films in the magazine stick to each other, so that no single sheet of film can be removed from the magazine. In the darkroom remove and riffle the films before reloading the magazine.

Message Displayed	Explanation
PLEASE CHECK CASSETTE IN DARKROOM.	a) If there is no film in the cassette, have it checked by your KODAK SERVICE PROVIDER. b) If there is a film in the cassette, the cassette probably contained two films, and one was removed in the KODAK Miniloader 2000.
UNEXPOSED FILM LOST.	Cassette closing problem. Cassette returned open.
CASSETTE OUT TRANSPORT FAILED. OPEN COVER TO REMOVE FILM. EXPOSED FILM LOST.	When cassette was opened the film was not removed and the closing mechanism does not reach the bottom dead center. ASSUMPTION: A film is caught in the lightlock of the cassette.
CASSETTE OUT TRANSPORT FAILED. OPEN COVER TO REMOVE CASSETTE.	When cassette gets stuck while it is being fed out. See instructions pages 30 and 31.
EXPOSED FILM NOT REMOVED INSERT RECEIVE MAGAZINE 24 X 30 CM	The correct receive magazine for the inserted cassette size is not in position. Exchange the receive magazine (see instructions on page 19).
EXPOSED FILM LOST FILM JAM IN INTERFACE SYSTEM ERROR	The film did not reach the receive magazine. Press <CLEAR>. Open the magazine door and try to remove the receive magazine. When you can see the film stuck behind it, try to remove the film. Re-insert the receive magazine and close the magazine door. If you are not successful, please call your KODAK SERVICE PROVIDER.

Message Displayed	Explanation
EXPOSED FILM LOST FILM JAM IN RECEIVE MAGAZINE SYSTEM ERROR	The film did not completely enter the receive magazine.Press <CLEAR>. Open the magazine door and try to remove the receive magazine. If possible, remove the film.Re-insert the receive magazine and close the magazine door. If you are not successful, please call your KODAK SERVICE PROVIDER.
INTERFACE NOT READY	If the film chute does not adjust to the correct size. Please call your KODAK SERVICE PROVIDER.
PLEASE CALL FOR SERVICE.	If this message appears, inform your KODAK SERVICE PROVIDER. These errors can only be solved by your KODAK SERVICE PROVIDER.

HOW TO REMOVE A CASSETTE

To open the top cover turn the two top screws counterclockwise and carefully open the cover.
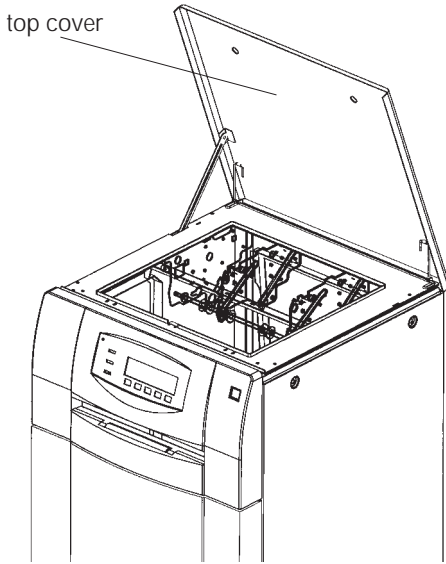
top cover

Release cassette by pressing cassette lid.
Push centering bars (see arrows in the following illustration) to full width.
If the film is caught, pull it out of the cassette first (the exposed film is useless now)

centering bars
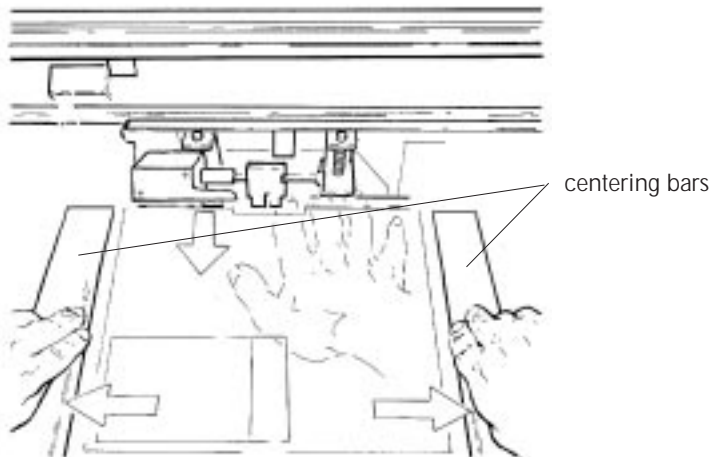
Close the cassette. Rotate knob (see illustration below) to open the input flap, and then carefully push the cassette through the entrance slot.

inner
front side

knob
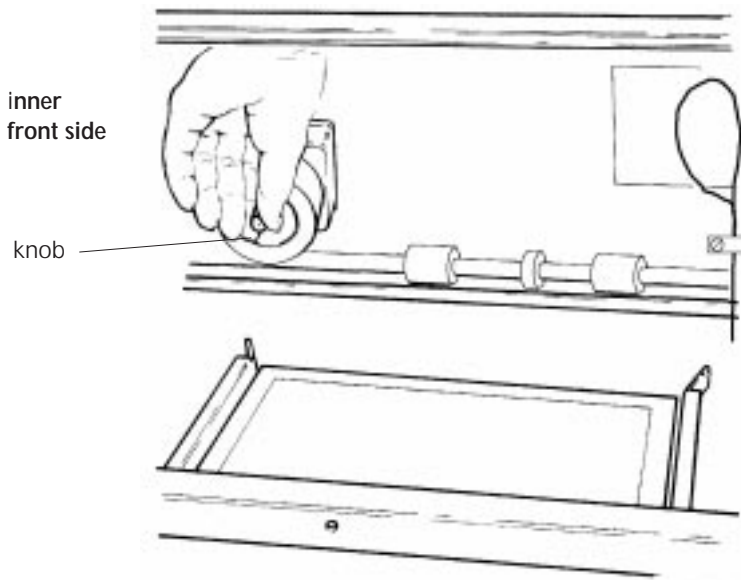
Close the top cover.

Reset the KODAK Miniloader 2000 by pressing <CLEAR>.

MAINTENANCE

Weekly:

On a weekly basis, the operator should clean the outside of the
KODAK Miniloader 2000 from dirt and dust, using a moist cloth.

WARNING:

**Before cleaning the unit,
pull off the power plug of the KODAK Miniloader 2000.**

Once a year:

Preventive Maintenance by your KODAK Service Provider is recommended.
Please contact your KODAK Service Provider.

WARRANTY

Kodak warrants this KODAK Miniloader 2000 to function correctly one year from the date of initial installation, when installed within one year from date of shipment.

Warranty Repair Coverage

If this equipment does not function correctly during the warranty period, the distributor (for KODAK Miniloader 2000) who sold the equipment will provide or arrange for the repair of the equipment during the distributor´s normal working hours. Such repair service will include any adjustments and/or replacement of parts required to maintain your equipment in good working order.

How to Obtain Service

Should the equipment require service, refer to the sales contract for details on whom to call for service, or contact the distributor (for KODAK Miniloader 2000) who sold the equipment.

Limitations

Warranty service is limited to the contiguous United States, the island of Oahu in Hawaii, and certain area of Alaska.

This warranty does not cover

- circumstances beyond the control of Kodak
- misuse
- abuse
- attachments
- accessories
- alterations not marketed by Kodak (including service or parts to correct problems resulting from the use of such attachments, accessories, or alterations)
- failure to follow the operating instructions recommended by Kodak
- supply items

Kodak makes no other warranties, express or implied, for this equipment.

Repair without charge is the only obligation of both Kodak and the distributor under this warranty. Kodak will not be responsible for any consequential or incidential

damages resulting from the sale, use, or improper functioning of this equipment, even if loss or damage is caused by the negligence or other fault of Kodak.

Such damages for which Kodak will not be responsible, include, but are not limited to, loss of revenue or profit, downtime costs, loss of use of the equipment, cost of any substitute equipment, facilities or services or claim of your customers for such damages.

This limitation of liability will not apply to claims for injury to persons or damage to property caused by the sole negligence or fault of Kodak or persons under its direction or control.

KEY OPERATOR INSTRUCTIONS

RESIZING SUPPLY MAGAZINES

When a new film size has to be used in the KODAK Miniloader 2000 you can code any supply magazine to hold the new film size. The following sizes can be used:

MAMMOGRAPHY FILM
> 18 x 24 cm
> 24 x 30 cm
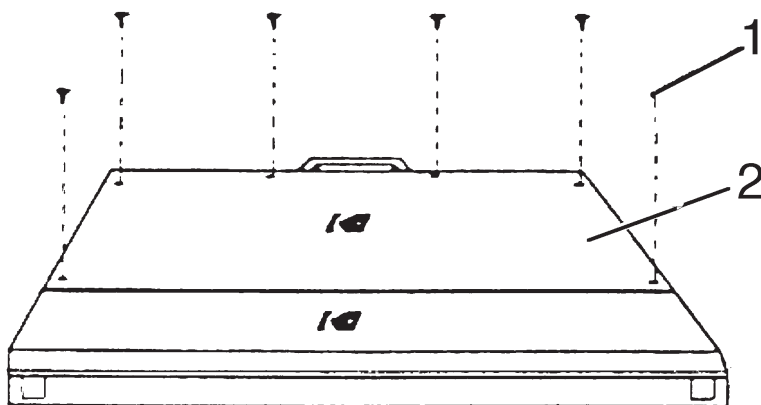
1   screw (6)
2   cover

1.   Remove the cover of the supply magazine.

2.   Place the stops in the recesses corresponding to the film size. The film sizes are marked in the recesses.

| IMPORTANT: |

**The left and right stops have to be positioned with their noses as indicated in the illustration on page 2-2.
Otherwise the supply magazine cannot be closed!**
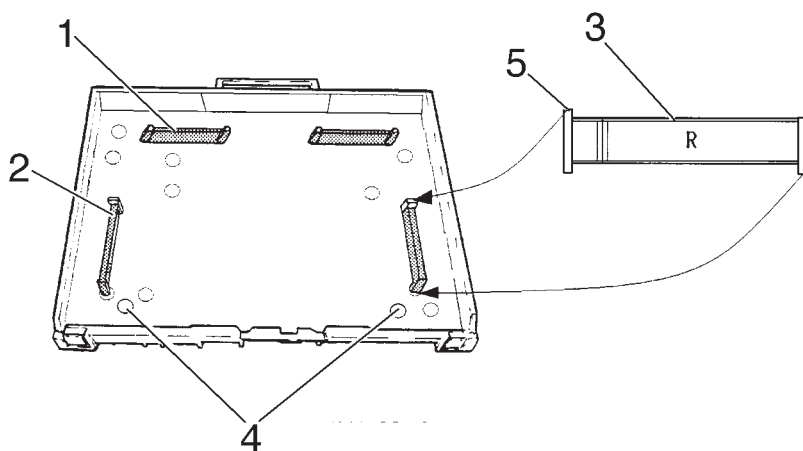
1	stop rear	4	recess with film size
2	stop left	5	nose
3	stop right		

3. Reinstall the cover of the supply magazine. The mechanical adjustment of the supply magazine is completed now.

4. To enable the KODAK Miniloader 2000 to decode the correct supply magazine size, please provide the supply magazines with reflective stickers. The correct position of the stickers can be taken from the following table and illustration:

Film Size	Position B1	Position B2	Position B3	Position B4 (Type 2)
18 x 24 cm	YES	NO	NO	NO
18 x 24 cm M #2	YES	NO	NO	YES
24 x 30 cm	YES	YES	NO	NO
24 x 30 cm M #2	YES	YES	NO	YES
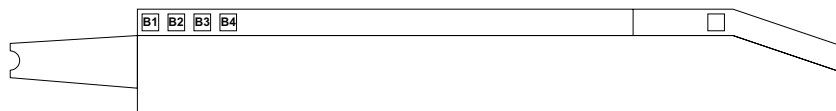
5.   After the reflective stickers have been set:
       Open supply magazine door of KODAK Miniloader 2000.

6.   Insert the recoded supply magazine and close the magazine door.

7.   Look at the display: Is the correct film size displayed?
       If not, take out the supply magazine and check the setting of the reflective stickers.

8.   Load the recoded supply magazine with films.

9.   Check whether there is too much play between the films and the stops in the
       supply magazine. There must not be more than appr. 4 mm (1/6") clearance
        between the films and the stops. If there is too much play, remove the films and
       check the setting of the stops inside the supply magazine.

10.   Load the supply magazine with films and insert it into the KODAK
        Miniloader 2000.

IMPORTANT:

**Use the supply magazine only if you are absolutely sure that the setting of the reflec-
tive stickers and the stops is correct.
Otherwise you can cause serious damage to the KODAK Miniloader 2000.**

FAILURES AND ERROR HANDLING··

The KODAK Miniloader 2000 is a microprocessor-controlled unit that
minimizes the actions necessary to solve any possible problems in the unit.
Any time there is a failure in the KODAK Miniloader 2000 the micro-processor will
start an automatic error handling sequence.

The KODAK Miniloader 2000 will always try to save the exposed films. That means
whenever a failure occurs during the cycle the KODAK Miniloader 2000
will try to unload the cassette, and feed out the cassette.

There are two groups of failures which can occur in the KODAK Miniloader 2000:

1.   Failures that can only be solved by your KODAK SERVICE PROVIDER.

2.   Failures that can be corrected by the operator or by the KODAK Miniloader
        2000 itself.

Whenever a failure occurs in the cycle of the KODAK Miniloader 2000 the error and
the action to be taken will be displayed.
.
As the display of the KODAK Miniloader 2000 consists of four lines only, in some
cases it will take more than one screen to display the whole error message. In these
cases the right hand key is used to obtain more information on the screen.

```
┌──────────────────────────────────────┐
│ ┌──────────────────────────────────┐ │
│ │                                  │ │
│ │        ERROR  MESSAGE  1         │ │
│ │                                  │ │
│ ├──────────────────────────────────┤ │
│ │                             MORE │ │
│ └──────────────────────────────────┘ │
└──────────────────────────────────────┘
   ▭       ▭        ▭        ▭        ▭
```

```
┌─────────────────────────────────────────┐
│                                         │
│          ERROR  MESSAGE  2              │
│                                         │
│                                         │
│                                  MORE   │
└─────────────────────────────────────────┘
  ▭        ▭        ▭        ▭        ▭
```

At the end of the messages the following screen will appear:

```
┌─────────────────────────────────────────┐
│                                         │
│        LAST  ERROR  MESSAGE             │
│                                         │
│  CLEAR            CODE          RETURN   │
└─────────────────────────────────────────┘
  ▭        ▭        ▭        ▭        ▭
```

FUNCTION BUTTONS:

. . . .

<CLEAR>   Press this button after you followed any steps you were told
to perform in the error message (if there were any). After this
button has been pressed the KODAK Miniloader 2000
will bring all motors to home position and check their
functions.
If this procedure was successful, the green status light will
appear, and you can start working again with the KODAK
Miniloader 2000.

                                    If this automatic test was not successful an error message will
appear again, and in critical failures also the advice to call
for service personnel as serious failures are too difficult to be
solved by the operator.

<RETURN>   After having pressed this button the first display of the error
message appears once more, and you can move through the
whole message again.

<CODE>   To give your KODAK SERVICE PROVIDER information
concerning the failures which occured this key should be
pressed.
A code will appear on the display. Please write down the
complete code and pass it on to the service personnel as
soon as you call for service. With the computer aided
diagnostic system the service person can check the possible
causes of the failures in advance.
With this procedure Kodak is able to minimize the down time
of the unit.

                                      As long as the error code is displayed <CLEAR> and
<RETURN> will also appear.
They have the functions as explained above.

KODAK MINILOADER 2000 KEY OPERATOR INSTRUCTIONS

```
┌─────────────────────────────────┐
│                                 │
│       ERROR  MESSAGE  1         │
│                                 │
│                          MORE   │
└─────────────────────────────────┘
   ▭     ▭     ▭     ▭     ▭

┌─────────────────────────────────┐
│                                 │
│       ERROR  MESSAGE  2         │
│                                 │
│                          MORE   │
└─────────────────────────────────┘
   ▭     ▭     ▭     ▭     ▭

┌─────────────────────────────────┐
│                                 │
│      LAST  ERROR  MESSAGE       │
│                                 │
│ CLEAR        CODE       RETURN  │
└─────────────────────────────────┘
   ▭     ▭     ▭     ▭     ▭
                  ERROR  CODE
┌─────────────────────────────────┐
│                                 │
│          S   M   C              │
│          XX  XX  XX             │
│ CLEAR                   RETURN  │
└─────────────────────────────────┘
   ▭     ▭     ▭     ▭     ▭
```
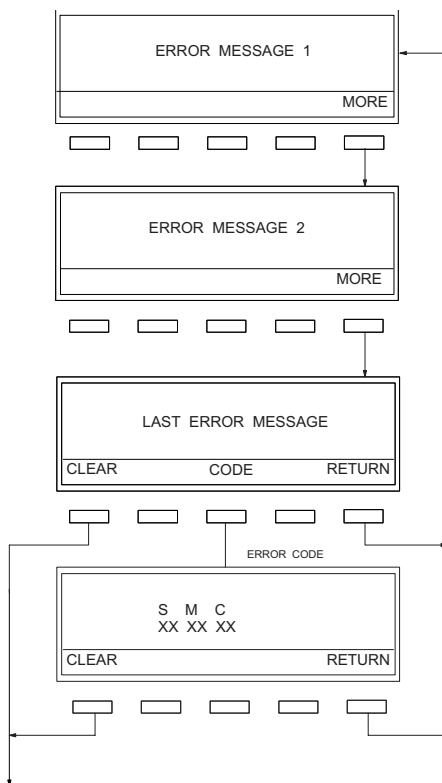
AUTOMATIC RESET OF THE KODAK Miniloader 2000

If successful: the unit will be ready for operation again.
If not successful: call for service.

FAILURES NOT DETECTED BY THE KODAK MINILOADER 2000

Most of the possible failures of the KODAK Miniloader 2000 are detected by the unit itself. Only the following few are not detectable.

Failures:	Causes:
Wrong film	Is the correct size displayed by the KODAK Miniloader 2000?
	Are all magazines seated correctly?
	Check the reflective stickers of the supply magazines (see magazine coding).
	Further possible causes:
	If reflective stickers are correct, but wrong size detection:
	Move supply magazine to another level. By moving the supply magazine to another level, the problem of the wrong size detection might be solved, although there is a failure in the size detection. Please inform your KODAK SERVICE PROVIDER of this failure.
	If supply magazine detection is o.k.:
	Are your cassettes o.k.?
Message: Film not available	If edges are damaged, have the cassette checked by your KODAK SERVICE PROVIDER. If cassette and supply magazine detection are o.k., call your KODAK SERVICE PROVIDER.